25th Annual Symposium
Visual Sciences Research Center

Schedule

Friday, May 12, 2023

8:00 Continental Breakfast

8:45 **Irina Pikuleva**
Professor and Vice Chair of Research, Ophthalmology & Visual Sciences
Case Western Reserve University
Opening Remarks

8:55 **Jonathan Lass**
Charles I Thomas Professor and Vice Chair for Academic Affairs, Ophthalmology
Case Western Reserve University
Founding of the CWRU Visual Sciences Research Center and its Symposium

9:10 **Johannes Von Lintig**
Professor, Pharmacology
Case Western Reserve University
Training Grant Update

Session 1 - Moderator: Johannes Von Lintig

9:15 **Jean Moon**
Graduate Student, Pharmacology
Johannes von Lintig Lab
Retinoid homeostasis and ocular morphology are compromised in STRA6 deficient mice

9:35 **Angela Liu**
Graduate Student, Pathology
Parameswaran Ramakrishnan Lab
Novel role of c-Rel O-GlcNAcylation in retinal inflammation

9:55 **Alyssa Hubel**
Graduate Student, Medicine
Carlos Subauste Lab
Inhibition of Src Signaling Induces Autophagic Killing of Toxoplasma gondii Independent of EGF Receptor

10:15 **Lauren Cruz**
Graduate Student, Population and Quantitative Health Sciences
Jessica Cooke Bailey Lab
Co-Mentor, Dana Crawford
Prioritizing diversity in vision science research

10:35 **Break**

Keynote Presentation - Introduction: Paul Park

10:50 **Donald J. Zack**
Professor, Ophthalmology
Johns Hopkins University
High Content Screening Approaches to Study Retinal Development and Degeneration

11:50 – 1:20 Lunch and Poster Session

Session 2 - Moderator: Patricia Taylor

1:20 **Scott Howell**
Senior Researcher, Ophthalmology & Visual Sciences
Patricia Taylor Lab
Diabetes-mediated Interleukin (IL)-17A enhances retinal pathogenesis in Type II diabetics with retinopathy

1:40 **Lana Pollock**
Research Associate, Cole Eye Institute
Bela Anand-Apte Lab
Disruption of retinoic acid signaling results in blood-retinal barrier breakdown and altered mTOR signaling in the retina

2:00 **Charles Guo**
Undergraduate Student, Case Western Reserve University
Douglas Rhee Lab
Co-Mentor, Shigemi Matsuyama
Suppression of Integrin-Linked Kinase in Human Trabecular Meshwork Alters SPARC's Effect on Extracellular Matrix and Intraocular Pressure

2:20 **Nicole El-Darzi**
Research Assistant, Ophthalmology & Visual Sciences
Irina Pikuleva Lab
CYP46A1 activator efavirenz normalizes intraocular pressure and retinal ganglion cell function in Apoj$^{-/-}$ mice, despite their retinal cholesterol levels remaining decreased

2:40 **Michael Jenkins**
Associate Professor, Biomedical Engineering
Innervation of the cornea

3:00 **Break**

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Session 3 - Moderator: Paul Park

3:15 **Sudha Iyengar**
Professor and Vice Chair for Research, Population and Quantitative Health Sciences
Distinctive cross-ancestry genetic architecture for age-related macular degeneration

3:35 **Beata Jastrzebska**
Assistant Professor, Pharmacology
Pharmacological chaperones correcting rhodopsin misfolding in retinitis pigmentosa

3:55 **Sreelakshmi Vasudevan**
Postdoctoral Scholar, Ophthalmology & Visual Sciences
Paul Park Lab
Analysis of two rhodopsin mutations in retinitis pigmentosa

4:15 **Shigemi Matsuyama**
Associate Professor, Ophthalmology & Visual Sciences
Development of new cytoprotective small molecule (CMS) M109S that protects the retinal photoreceptor cells from mitochondria-dependent cell death

4:35 **Douglas Rhee**
Professor and Chair, Ophthalmology & Visual Sciences
Case Western Reserve University
Closing Remarks

4:45 **Reception** Wolstein Research Building Lobby

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